Express Mail Label: EV6 1075223US Date of Deposit: March 19, 2002 030 63-07-02

Attorney Docket No.: 21402-163 (Cura-463)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPRICANTS :

Kekuda et al.

HAL NUMBER :

09/981.566

EXAMINER:

Not Yet Assigned

7

FILING DATE:

October 16, 2001

ART UNIT:

1653

FOR:

Novel GPCR-like Proteins and Nucleic Acids Encoding Same

BOX IDS

MAR 1 9 2002

Assistant Commissioner for Patents Washington, D.C. 20231



TRANSMITTAL LETTER

Transmitted herewith for filing in the present application are the following documents:

- 1. Information Disclosure Statement (1 page);
- 2. Modified Form 1449/PTO (3 pages), in duplicate;
- 3. Cited References C1-C86; and
- 4. Return Postcard.

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 542-6000, Boston, Massachusetts.

The Commissioner is authorized to charge any fees that may be due, or to credit any overpayment, to the undersigned's account, Deposit Account No. 50-0311 Ref. No. 21402-163 (Cura-463). A duplicate copy of this transmittal letter is enclosed herewith.

Respectfully submitted

Ivor R. Elrifi, Reg. No. 39,529

Attorney for Applicant

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY and POPEO, P.C.

One Financial Center

Boston, Massachusetts 02111

Tel: (617) 542-6000 Fax: (617) 542-2241

Dated: March 19, 2002

TRA 1627712v1

Express Mail Label No.: EV058075223US Date of Deposit: March 19, 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

FOR: Novel GPCR-like Proteins and Nucleic Acids Encoding Same

PLICANT(S): Kekuda et al.

AL NUMBER: 09/981,566

EXAMINER: Not Yet Assigned

FILING DATE: October 16, 2001

ART UNIT: 1653

BOX IDS

Assistant Commissioner for Patents Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants hereby make of record the documents listed on the attached modified Form PTO-1449 (submitted in duplicate) in the above-identified application, copies of which are submitted herewith. The order of presentation of the references should not be construed as an indication of the importance of the references.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action based on the merits in the above-identified case. Accordingly, no fee or certification is believed required.

It is respectfully requested that the Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims, and signs the enclosed Form PTO-1449 to evidence that the cited information has been fully considered by the PATENT AND TRADEMARK OFFICE during the examination of this application.

Please charge any additional fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311 (Reference No. 21402-163 (Cura-463)).

Respectfully submitted,

Ivor R. Elmi Registration No. 39,529

Attorney for the Applicants

c/o MINTZ, LEVIN, COHN, FERRIS,

GLOVSKY and POPEO, P.C.

One Financial Center

Boston, Massachusetts 02111

Tel: (617) 542-6000 Fax: (617) 542-2241

Dated: March 19, 2002

TRA 1644651v1

Express Mail No.: EV058075223US Date of Deposit: March 19, 2002

Proce type a plus sign (+) in this box +

PTO SB (12-97)
Approved for use through 9/30/00 OMB 0651-0031
Patent and Trademark Office U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

fied Form 1449/PTO

MAR 1 9 2002

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number	09/981,566	
Filing Date	10/16/01	
First Named Inventor	Kekuda	
Group Art Unit	1653	
Examiner Name	Not Yet Assigned	15
Attorney Docket Number	21402-163 (Cura-463)	5

Exam Initials	Cite No.	U.S. Patent Document No.	Issue Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date If Appropriate
	A1	<u> </u>					

FOREIGN PATENT DOCUMENTS					
Exam Initials	Cite No.	Foreign Patent Document Office Number	Name of Patentee(s) or Applicant(s)	Date of Publication	Translation Yes No
	B1				

	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.		
	C1	Alderborn, A., A. Kristofferson, et al. (2000). "Determination of single-nucleotide polymorphisms by real-time pyrophosphate DNA sequencing." Genome Res 10(8): 1249-58.		
	C2	Asai, H., H. Kasai, et al. (1996). "Genomic structure and transcription of a murine odorant receptor gene: differential initiation of transcription in the olfactory and testicular cells." Biochem Biophys Res Commun 221(2): 240-7.		
	C3	Ben-Arie, N., D. Lancet, et al. (1994). "Olfactory receptor gene cluster on human chromosome 17: possible duplication of an ancestral receptor repertoire." Hum Mol Genet 3(2): 229-35.		
	C4	Buck, L. and R. Axel (1991). "A novel multigene family may encode odorant receptors: a molecular basis for odor recognition." Cell 65(1): 175-87.		
	C5	GenBank Accession Number: AAG41683 (20-DEC-2000)		
	C6	GenBank Accession Number: AAG41684 (20-DEC-2000)		
	C7	GenBank Accession Number: AAG45186 (20-JUN-2001)		
	C8	GenBank Accession Number: AAG45207 (20-JUN-2001)		
-	C9	GenBank Accession Number: AAK69553 (02-JUL-2001)		
	C10	GenBank Accession Number: AAK70859 (4-JUL-2001)		
	C11	GenBank Accession Number: AAK95088 (27-AUG-2001)		
	C12	GenBank Accession Number: AAK95107 (27-AUG-2001)		
	C13	GenBank Accession Number: AB030893 (03-NOV-1999)		
	C14	GenBank Accession Number: AF071080 (20-DEC-2000)		
	C15	GenBank Accession Number: AF098664 (26-MAR-1999)		
	C16	GenBank Accession Number: AF102523 (08-FEB-1999)		
	C17	GenBank Accession Number: AF121975 (25-APR-1999)		
	C18	GenBank Accession Number: AF121976 (07-DEC-1999)		
	C19	GenBank Accession Number: AF133300 (20-DEC-2000)		

U.S.S.N.: 09/981,566 Applicants: Kekuda et al. MAR 1 9 2002

	OTHER RANDR ART – NON PATENT LITERATURE DOCUMENTS Exam Cite No. Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.				
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.			
	C20	GenBank Accession Number: AF137396 (20-DEC-2000)			
	C21	GenBank Accession Number: AF247657 (04-JAN-2001)			
	C22	GenBank Accession Number: AF321233 (20-JUN-2001)			
	C23	GenBank Accession Number: AF321237 (20-JUN-2001)			
	C24	GenBank Accession Number: AJ012570 (03-AUG-1999)			
	C25	GenBank Accession Number: AJ133429 (09-SEP-1999)			
	C26	GenBank Accession Number: AJ133430 (09-SEP-1999)			
	C27	GenBank Accession Number: B23701 (Oct 9 1997)			
	C28	GenBank Accession Number: CAC34662 (17-MAR-2001)			
	C29	GenBank Accession Number: CAC43444 (03-JUL-2001)			
	C30	GenBank Accession Number: M64377 (27-APR-1993)			
	C31	GenBank Accession Number: NP_038644 (07-JAN-2002)			
	C32	GenBank Accession Number: NP_038645 (07-JAN-2002)			
	C33	GenBank Accession Number: NP_038646 (07-JAN-2002)			
	C34	GenBank Accession Number: NP_065623 (07-JAN-2002)			
	C35	GenBank Accession Number: O43749 (20-AUG-2001)			
	C36	GenBank Accession Number: 043869 (16-OCT-2001)			
	C37	GenBank Accession Number: 076000 (16-OCT-2001)			
	C38	GenBank Accession Number: 076001 (20-AUG-2001)			
	C39	GenBank Accession Number: 088628 (16-OCT-2001)			
	C40	GenBank Accession Number: P23266 (01-JUL-1993)			
	C41	GenBank Accession Number: P23275 (15-JUL-1998)			
	C42	GenBank Accession Number: P58180 (16-OCT-2001)			
	C43	GenBank Accession Number: Q15615 (16-OCT-2001)			
	C44	GenBank Accession Number: Q95156 (01-NOV-1997)			
	C45	GenBank Accession Number: U53681 (03-DEC-1996)			
	C46	Issel-Tarver, L. and J. Rine (1996). "Organization and expression of canine olfactory receptor genes." Proc Natl Acad Sci U S A 93(20): 10897-902.			
	C47	Kourie, J. I. (2001). "Mechanisms of amyloid beta protein-induced modification in ion transport systems: implications for neurodegenerative diseases." Cell Mol Neurobiol 21(3): 173-213.			
	C48	Krautwurst, D., K. W. Yau, et al. (1998). "Identification of ligands for olfactory receptors by functional expression of a receptor library." Cell 95(7): 917-26.			
	C49	Malnıc, B., J. Hirono, et al. (1999). "Combinatorial receptor codes for odors." Cell 96(5): 713-23.			
-	C50	OMIM: 164342 (6-JULY-1996)			
	C51	Parmentier, M., F. Libert, et al. (1992). "Expression of members of the putative olfactory receptor gene family in mammalian germ cells." Nature 355(6359): 453-5.			
	C52	Rouquier, S., C. Friedman, et al. (1998). "A gene recently inactivated in human defines a new olfactory receptor family in mammals." Hum Mol Genet 7(9): 1337-45.			
	C53	SWALL (SPTR) Accession Number: Q9EPF6 (1-MAR-2001)			
	C54	SWALL (SPTR) Accession Number: Q9EPG1 (1-MAR-2001)			
	C55	SWALL (SPTR) Accession Number: Q9EPG2 (1-MAR-2001)			
	C56	SWALL (SPTR) Accession Number: Q9EPV0 (1-MAR-2001)			
	C57				
	007	SWALL (SPTR) Accession Number: Q9EQQ5 (1-MAR-2001)			

U.S.S.N.: 09/981,566

Applicants: Kekuda et al.

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Exam Initials	Cite No.	OTHER PAIOR ART – NON PATENT LITERATURE DOCUMENTS Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.		
- 	C58	SWALL (SPTR) Accession Number: Q9GZK1 (1-MAR-2001)		
-	C59	SWALL (SPTR) Accession Number: Q9GZK6 (1-MAR-2001)		
	C60	SWALL (SPTR) Accession Number: Q9H207 (16-OCT-2001)		
	C61	SWALL (SPTR) Accession Number: Q9H209 (16-OCT-2001)		
	C62	SWALL (SPTR) Accession Number: Q9H255 (16-OCT-2001)		
	C63	SWALL (SPTR) Accession Number: Q9H346 (16-OCT-2001)		
	C64	SWALL (SPTR) Accession Number: Q9JKA6 (1-OCT-2000)		
	C65	SWALL (SPTR) Accession Number: Q9QZ17 (1-MAY-2000)		
	C66	SWALL (SPTR) Accession Number: Q9QZ18 (1-MAY-2000)		
	C67	SWALL (SPTR) Accession Number: Q9QZ19 (1-MAY-2000)		
	C68	SWALL (SPTR) Accession Number: Q9QZ20 (1-MAY-2000)		
	C69	SWALL (SPTR) Accession Number: Q9QZ21 (1-MAY-2000)		
	C70	SWALL (SPTR) Accession Number: Q9QZ22 (1-MAY-2000)		
	C71	SWALL (SPTR) Accession Number: Q9R0K3 (1-MAY-2000)		
	C72	SWALL (SPTR) Accession Number: Q9R0K4 (1-MAY-2000)		
	C73	SWALL (SPTR) Accession Number: Q9R0K5 (1-MAY-2000)		
	C74	SWALL (SPTR) Accession Number: Q9TUA1 (1-MAY-2000)		
	C75	SWALL (SPTR) Accession Number: Q9UKL2 (16-OCT-2001)		
	C76	SWALL (SPTR) Accession Number: Q9WU89 (1-NOV-1999)		
	C77	SWALL (SPTR) Accession Number: Q9WU90 (1-NOV-1999)		
	C78	SWALL (SPTR) Accession Number: Q9WVD9 (1-NOV-1999)		
	C79	SWALL (SPTR) Accession Number: Q9WVN6 (1-NOV-1999)		
	C80	SWALL (SPTR) Accession Number: Q9Y3N9 (16-OCT-2001)		
	C81	SWALL (SPTR) Accession Number: Q9Z1V0 (1-MAY-1999)		
	C82	Thomas, M. B., S. L. Haines, et al. (1996). "Chemoreceptors expressed in taste, olfactory and male reproductive tissues." Gene 178(1-2): 1-5.		
	C83	Vanderhaeghen, P., S. Schurmans, et al. (1997). "Specific repertoire of olfactory receptor genes in the male germ cells of several mammalian species." Genomics 39(3): 239-46.		
	C84	Walensky, L. D., M. Ruat, et al. (1998). "Two novel odorant receptor families expressed in spermatids undergo 5'- splicing." J Biol Chem 273(16): 9378-87.		
	C85	Wootton, J. C. and S. Federhen (1996). "Analysis of compositionally biased regions in sequence databases." Methods Enzymol 266: 554-71.		
	C86	Xie, S. Y., P. Feinstein, et al. (2000). "Characterization of a cluster comprising approximately 100 odorant receptor genes in mouse." Mamm Genome 11(12): 1070-8.		

^{*} a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. _______, filed _______, and relied upon for an earlier filing date under __, and relied upon for an earlier filing date under _____ , filed _ 35 U.S.C. §120 (continuation, continuation-in-part, and divisional applications).

Examiner Signature Date Considered	
------------------------------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant